`echidna SPEC :: read_rbczbs`

1. Reads Fourier harmonics of the boundary from file, and plots boundary surface on `cylindrical Poincare` window.
2. The boundary is described according to

$$R(\theta,\zeta) = \sum_j R_j \cos(m_j\theta - n_j N\zeta), \tag{1}$$

$$Z(\theta,\zeta) = \sum_j Z_j \sin(m_j\theta - n_j N\zeta), \tag{2}$$

   where θ is an arbitrary poloidal angle and $\zeta \equiv \phi$ is the cylindrical angle, and $N \equiv$`Nfp` is the field periodicity.
3. This action is initiated by clicking on the read n,m,rbc,zbs button on the `geometry` tab. A window will open so the user can select the input file.
4. Files with extensions `.rbczbs`, `.rbc` and `.zbs` can be read in:
   - the `ext.rbczbs` file is expected to contain four columns containing n_j, m_j, R_j and Z_j,
   - the `ext.rbc` file is expected to contain three columns containing n_j, m_j and R_j,
   - the `ext.zbs` file is expected to contain three columns containing n_j, m_j and Z_j.
5. An arbitrary number of rows may be present in the input file.
6. After updating the widget with the new boundary geometry, the new boundary is overplotted on the `cylindrical Poincare` window in red.

`read_rbczbs.pro`

last modified on 2012-05-25 ;